

Sequence Listing

<110> Botstein,David

Desnoyers,Luc

Ferrara,Napoleone

Fong,Sherman

Gao,Wei-Qiang

Goddard,Audrey

Gurney,Austin L.

Pan,James

Roy,Margaret Ann

Stewart,Timothy A.

Tumas,Daniel

Watanabe,Colin K.

Wood,William I.

<120> Secreted and Transmembrane Polypeptides and Nucleic  
Acids Encoding the Same

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HOMO SAPIENS

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His Val Leu Gly Met Val Pro Pro Ala Cys Leu Pro Gly Asp Glu  
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Val Gly Ser Glu Gln Arg Gly Glu Gln Val Thr Asn Gly Arg Glu  
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Ala Gly Ala Glu Leu Leu Thr Glu Val Asn Arg Leu Gly Ser Gly  
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Ser Ser Ala Ala Ser Glu Glu Glu Glu Glu Glu Pro Pro  
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710 715 720  
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725 730 735  
Leu Trp Leu Ser Pro Leu Thr Glu Gly Ala Pro Arg Thr Arg Glu  
740 745 750  
Glu Thr Arg Asp Leu Val His Ala Pro Leu Pro Leu Thr Trp Lys  
755 760 765  
Arg Ser Ser Leu Cys Gly Glu Glu Gln Gly Ser Pro Glu Glu Leu  
770 775 780  
Arg Gln Arg Glu Ala Ala Glu Pro Leu Val Gly Arg Val Leu Pro  
785 790 795  
Val Gly Glu Ala Gly Leu Pro Trp Asn Phe Gly Pro Leu Ser Lys  
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Glu His Leu Glu Lys Glu Leu Ser Glu	Lys Ser Gly Gln Leu Arg	
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Gln Gly Ser Ala Gln Ser Gln Gln Ile	Arg Gly Glu Ile Asp	
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Ser Leu Arg Gln Glu Lys Asp Ser Leu	Leu Lys Gln Arg Leu Glu	
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Ile Asp Gly Lys Leu Arg Gln Gly Ser	Leu Leu Ser Pro Glu Glu	
515	520	525
Glu Arg Thr Leu Phe Gln Leu Asp Glu	Ala Ile Glu Ala Leu Asp	
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Gln His Gln Gln Gln Ile Ala Phe Ser	Glu Leu Glu Met Gln Leu	
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Glu Glu Gln Gln Arg Leu Val Tyr Trp	Leu Glu Val Ala Leu Glu	
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Arg Gln Arg Leu Glu Met Asp Arg Gln	Leu Thr Leu Gln Gln Lys	
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Glu His Glu Gln Asn Met Gln Leu Leu	Leu Gln Ser Arg Asp	
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His Leu Gly Glu Gly Leu Ala Asp Ser	Arg Arg Gln Tyr Glu Ala	
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Arg Ile Gln Ala Leu Glu Lys Glu Leu	Gly Arg Tyr Met Trp Ile	
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Lys Ile Tyr Asn Pro Ser Glu Gln Cys Cys Tyr Asp Asp Ala Ile  
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Leu Ser Leu Lys Glu Thr Arg Arg Cys Gly Ser Thr Cys Thr Phe  
65 70 75  
Trp Pro Cys Phe Glu Leu Cys Cys Pro Glu Ser Phe Gly Pro Gln  
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Gln Lys Phe Leu Val Lys Leu Arg Val Leu Gly Met Lys Ser Gln  
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Leu Leu Val Thr Cys Cys Leu Met Val Ala Leu Cys Ser Pro Ser  
20 25 30  
  
Ile Pro Leu Glu Lys Leu Ala Gln Ala Pro Glu Gln Pro Gly Gln  
35 40 45  
  
Glu Lys Arg Glu His Ala Thr Arg Asp Gly Pro Gly Arg Val Asn  
50 55 60  
  
Glu Leu Gly Arg Pro Ala Arg Asp Glu Gly Gly Ser Gly Arg Asp  
65 70 75  
  
Trp Lys Ser Lys Ser Gly Arg Gly Leu Ala Gly Arg Glu Pro Trp  
80 85 90  
  
Ser Lys Leu Lys Gln Ala Trp Val Ser Gln Gly Gly Ala Lys  
95 100 105  
  
Ala Gly Asp Leu Gln Val Arg Pro Arg Gly Asp Thr Pro Gln Ala  
110 115 120  
  
Glu Ala Leu Ala Ala Ala Gln Asp Ala Ile Gly Pro Glu Leu  
125 130 135  
  
Ala Pro Thr Pro Glu Pro Pro Glu Glu Tyr Val Tyr Pro Asp Tyr  
140 145 150  
  
Arg Gly Lys Gly Cys Val Asp Glu Ser Gly Phe Val Tyr Ala Ile  
155 160 165  
  
Gly Glu Lys Phe Ala Pro Gly Pro Ser Ala Cys Pro Cys Leu Cys  
170 175 180  
  
Thr Glu Glu Gly Pro Leu Cys Ala Gln Pro Glu Cys Pro Arg Leu  
185 190 195  
  
His Pro Arg Cys Ile His Val Asp Thr Ser Gln Cys Cys Pro Gln  
200 205 210  
  
Cys Lys Glu Arg Lys Asn Tyr Cys Glu Phe Arg Gly Lys Thr Tyr  
215 220 225  
  
Gln Thr Leu Glu Glu Phe Val Val Ser Pro Cys Glu Arg Cys Arg

230                    235                    240

Cys Glu Ala Asn Gly Glu Val Leu Cys Thr Val Ser Ala Cys Pro  
245                    250                    255

Gln Thr Glu Cys Val Asp Pro Val Tyr Glu Pro Asp Gln Cys Cys  
260                    265                    270

Pro Ile Cys Lys Asn Gly Pro Asn Cys Phe Ala Glu Thr Ala Val  
275                    280                    285

Ile Pro Ala Gly Arg Glu Val Lys Thr Asp Glu Cys Thr Ile Cys  
290                    295                    300

His Cys Thr Tyr Glu Glu Gly Thr Trp Arg Ile Glu Arg Gln Ala  
305                    310                    315

Met Cys Thr Arg His Glu Cys Arg Gln Met  
320                    325

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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 12  
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<210> 13  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic Oligonucleotide Probe

<400> 13  
cgctcgattc tccatgtgcc ttcc 24

<210> 14  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
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<400> 14  
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<210> 15  
<211> 1587  
<212> DNA  
<213> Homo sapiens

<400> 15

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gttcagcatg tgtggaaagg gtccgaccta ccccggaat ggaccctaa 150  
gaacaccagc tgcgacacgcg gcttgggtg ccaggacacg ttgatgctca 200  
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<211> 437  
<212> PRT  
<213> Homo sapiens

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His Val Trp Lys Val Ser Asp Leu Pro Arg Gln Trp Thr Pro Lys  
35 40 45  
Asn Thr Ser Cys Asp Ser Gly Leu Gly Cys Gln Asp Thr Leu Met  
50 55 60  
Leu Ile Glu Ser Gly Pro Gln Val Ser Leu Val Leu Ser Lys Gly  
65 70 75  
Cys Thr Glu Ala Lys Asp Gln Glu Pro Arg Val Thr Glu His Arg  
80 85 90  
Met Gly Pro Gly Leu Ser Leu Ile Ser Tyr Thr Phe Val Cys Arg  
95 100 105  
Gln Glu Asp Phe Cys Asn Asn Leu Val Asn Ser Leu Pro Leu Trp  
110 115 120  
Ala Pro Gln Pro Pro Ala Asp Pro Gly Ser Leu Arg Cys Pro Val  
125 130 135  
Cys Leu Ser Met Glu Gly Cys Leu Glu Gly Thr Thr Glu Glu Ile  
140 145 150  
Cys Pro Lys Gly Thr Thr His Cys Tyr Asp Gly Leu Leu Arg Leu  
155 160 165  
Arg Gly Gly Gly Ile Phe Ser Asn Leu Arg Val Gln Gly Cys Met  
170 175 180  
Pro Gln Pro Gly Cys Asn Leu Leu Asn Gly Thr Gln Glu Ile Gly  
185 190 195  
Pro Val Gly Met Thr Glu Asn Cys Asn Arg Lys Asp Phe Leu Thr  
200 205 210  
Cys His Arg Gly Thr Thr Ile Met Thr His Gly Asn Leu Ala Gln  
215 220 225  
Glu Pro Thr Asp Trp Thr Ser Asn Thr Glu Met Cys Glu Val

230	235	240
Gly Gln Val Cys Gln Glu Thr Leu Leu Leu Ile Asp Val Gly Leu		
245	250	255
Thr Ser Thr Leu Val Gly Thr Lys Gly Cys Ser Thr Val Gly Ala		
260	265	270
Gln Asn Ser Gln Lys Thr Thr Ile His Ser Ala Pro Pro Gly Val		
275	280	285
Leu Val Ala Ser Tyr Thr His Phe Cys Ser Ser Asp Leu Cys Asn		
290	295	300
Ser Ala Ser Ser Ser Val Leu Leu Asn Ser Leu Pro Pro Gln		
305	310	315
Ala Ala Pro Val Pro Gly Asp Arg Gln Cys Pro Thr Cys Val Gln		
320	325	330
Pro Leu Gly Thr Cys Ser Ser Gly Ser Pro Arg Met Thr Cys Pro		
335	340	345
Arg Gly Ala Thr His Cys Tyr Asp Gly Tyr Ile His Leu Ser Gly		
350	355	360
Gly Gly Leu Ser Thr Lys Met Ser Ile Gln Gly Cys Val Ala Gln		
365	370	375
Pro Ser Ser Phe Leu Leu Asn His Thr Arg Gln Ile Gly Ile Phe		
380	385	390
Ser Ala Arg Glu Lys Arg Asp Val Gln Pro Pro Ala Ser Gln His		
395	400	405
Glu Gly Gly Ala Glu Gly Leu Glu Ser Leu Thr Trp Gly Val		
410	415	420
Gly Leu Ala Leu Ala Pro Ala Leu Trp Trp Gly Val Val Cys Pro		
425	430	435

Ser Cys

<210> 17  
<211> 2387  
<212> DNA  
<213> Homo sapiens

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ctataataaa gaaaattctt gtgactttaa aaaaaaaa 2387

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<211> 487  
<212> PRT  
<213> Homo sapiens

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20 25 30  
Ser Leu Leu Glu Pro Arg Asp Pro Val Ala Ser Ser Leu Ser Pro  
35 40 45  
Tyr Phe Gly Thr Lys Thr Arg Tyr Glu Asp Val Asn Pro Val Leu  
50 55 60  
Leu Ser Gly Pro Glu Ala Pro Trp Arg Asp Pro Glu Leu Leu Glu  
65 70 75  
Gly Thr Cys Thr Pro Val Gln Leu Val Ala Leu Ile Arg His Gly  
80 85 90  
Thr Arg Tyr Pro Thr Val Lys Gln Ile Arg Lys Leu Arg Gln Leu  
95 100 105  
His Gly Leu Leu Gln Ala Arg Gly Ser Arg Asp Gly Gly Ala Ser

110	115	120
Ser Thr Gly Ser Arg Asp Leu Gly Ala Ala	Leu Ala Asp Trp Pro	
125	130	135
Leu Trp Tyr Ala Asp Trp Met Asp Gly Gln	Leu Val Glu Lys Gly	
140	145	150
Arg Gln Asp Met Arg Gln Leu Ala Leu	Arg Leu Ala Ser Leu Phe	
155	160	165
Pro Ala Leu Phe Ser Arg Glu Asn Tyr Gly	Arg Leu Arg Leu Ile	
170	175	180
Thr Ser Ser Lys His Arg Cys Met Asp Ser	Ser Ala Ala Phe Leu	
185	190	195
Gln Gly Leu Trp Gln His Tyr His Pro Gly	Leu Pro Pro Pro Asp	
200	205	210
Val Ala Asp Met Glu Phe Gly Pro Pro	Thr Val Asn Asp Lys Leu	
215	220	225
Met Arg Phe Phe Asp His Cys Glu Lys	Phe Leu Thr Glu Val Glu	
230	235	240
Lys Asn Ala Thr Ala Leu Tyr His Val Glu	Ala Phe Lys Thr Gly	
245	250	255
Pro Glu Met Gln Asn Ile Leu Lys Lys	Val Ala Ala Thr Leu Gln	
260	265	270
Val Pro Val Asn Asp Leu Asn Ala Asp	Leu Ile Gln Val Ala Phe	
275	280	285
Phe Thr Cys Ser Phe Asp Leu Ala Ile	Lys Gly Val Lys Ser Pro	
290	295	300
Trp Cys Asp Val Phe Asp Ile Asp Asp Ala	Lys Val Leu Glu Tyr	
305	310	315
Leu Asn Asp Leu Lys Gln Tyr Trp Lys Arg	Gly Tyr Gly Tyr Thr	
320	325	330
Ile Asn Ser Arg Ser Ser Cys Thr Leu Phe	Gln Asp Ile Phe Gln	
335	340	345
His Leu Asp Lys Ala Val Glu Gln Lys	Gln Arg Ser Gln Pro Ile	
350	355	360
Ser Ser Pro Val Ile Leu Gln Phe Gly His	Ala Glu Thr Leu Leu	
365	370	375
Pro Leu Leu Ser Leu Met Gly Tyr Phe	Lys Asp Lys Glu Pro Leu	
380	385	390
Thr Ala Tyr Asn Tyr Lys Lys Gln Met His	Arg Lys Phe Arg Ser	
395	400	405

Gly Leu Ile Val Pro Tyr Ala Ser Asn Leu Ile Phe Val Leu Tyr  
410 415 420  
His Cys Glu Asn Ala Lys Thr Pro Lys Glu Gln Phe Arg Val Gln  
425 430 435  
Met Leu Leu Asn Glu Lys Val Leu Pro Leu Ala Tyr Ser Gln Glu  
440 445 450  
Thr Val Ser Phe Tyr Glu Asp Leu Lys Asn His Tyr Lys Asp Ile  
455 460 465  
Leu Gln Ser Cys Gln Thr Ser Glu Glu Cys Glu Leu Ala Arg Ala  
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Asn Ser Thr Ser Asp Glu Leu  
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<210> 19  
<211> 3554  
<212> DNA  
<213> Homo sapiens

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cttcttcctg ctgctgcctt tcagggcgtg cctgataggg gctgtaaatc 150  
tcaaattccag caatcgaacc ccagtggcac aggaatttga aagtgtggaa 200  
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gaagaaaatt caagatgaac aaaccacata tgtgttttt gacaacaaaa 300  
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gttgtcccttg ctgtactggc cctgatcagc ttggcatact gctgtgcata 850

19. *Leucosia* *leucostoma* *leucostoma* *leucostoma* *leucostoma* *leucostoma* *leucostoma*

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gacttcagac acaagtcatc gtttgtgatc tgagaccgc ggtgtggctg 1000  
agagcgaca gagcgcacgt gcacataacct ctgctagaaa ctccctgtcaa 1050  
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tttgcgtttt gcccaaagtt gaccactact cttcttactc taacaagcca 1150  
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ccca 3554

<210> 20  
<211> 310  
<212> PRT  
<213> Homo sapiens

<400> 20

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 35 40 45

Phe Glu Ser Val Glu Leu Ser Cys Ile Ile Thr Asp Ser Gln Thr  
 50 55 60

Ser Asp Pro Arg Ile Glu Trp Lys Ile Gln Asp Glu Gln Thr  
 65 70 75

Thr Tyr Val Phe Phe Asp Asn Lys Ile Gln Gly Asp Leu Ala Gly  
 80 85 90

Arg Ala Glu Ile Leu Gly Lys Thr Ser Leu Lys Ile Trp Asn Val  
 95 100 105

Thr Arg Arg Asp Ser Ala Leu Tyr Arg Cys Glu Val Val Ala Arg  
 110 115 120

Asn Asp Arg Lys Glu Ile Asp Glu Ile Val Ile Glu Leu Thr Val  
 125 130 135

Gln Val Lys Pro Val Thr Pro Val Cys Arg Val Pro Lys Ala Val  
 140 145 150

Pro Val Gly Lys Met Ala Thr Leu His Cys Gln Glu Ser Glu Gly  
 155 160 165

His Pro Arg Pro His Tyr Ser Trp Tyr Arg Asn Asp Val Pro Leu  
 170 175 180

Pro Thr Asp Ser Arg Ala Asn Pro Arg Phe Arg Asn Ser Ser Phe  
 185 190 195

His Leu Asn Ser Glu Thr Gly Thr Leu Val Phe Thr Ala Val His  
 200 205 210

Lys Asp Asp Ser Gly Gln Tyr Tyr Cys Ile Ala Ser Asn Asp Ala  
 215 220 225

Gly Ser Ala Arg Cys Glu Glu Gln Glu Met Glu Val Tyr Asp Leu  
 230 235 240

Asn Ile Gly Gly Ile Ile Gly Gly Val Leu Val Val Leu Ala Val  
 245 250 255

Leu Ala Leu Ile Thr Leu Gly Ile Cys Cys Ala Tyr Arg Arg Gly  
 260 265 270

Tyr Phe Ile Asn Asn Lys Gln Asp Gly Glu Ser Tyr Lys Asn Pro  
 275 280 285

Gly Lys Pro Asp Gly Val Asn Tyr Ile Arg Thr Asp Glu Glu Gly

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295

300

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<210> 21

<211> 3437

<212> DNA

<213> Homo sapiens

<400> 21

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Nucleotide sequence

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<210> 22

<211> 1029

<212> PRT

<213> Homo sapiens

<400> 22

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Ile	Trp	Phe	Pro	Glu	Glu	Lys	Pro	Leu	Pro	Thr	Ala	Phe	Leu	Val
				35					40					45

Asp	Thr	Ser	Glu	Glu	Ala	Leu	Leu	Leu	Pro	Asp	Trp	Leu	Lys	Leu
					50				55					60

Arg	Met	Ile	Arg	Ser	Glu	Val	Leu	Arg	Leu	Val	Asp	Ala	Ala	Leu
				65				70						75

Gln	Asp	Leu	Glu	Pro	Gln	Gln	Leu	Leu	Leu	Phe	Val	Gln	Ser	Phe
				80				85						90

Gly	Ile	Pro	Val	Ser	Ser	Met	Ser	Lys	Leu	Leu	Gln	Phe	Leu	Asp
				95					100					105

Gln Ala Val Ala His Asp Pro Gln Thr Leu Glu Gln Asn Ile Met  
                   110                  115                  120  
 Asp Lys Asn Tyr Met Ala His Leu Val Glu Val Gln His Glu Arg  
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 Gly Ala Ser Gly Gly Gln Thr Phe His Ser Leu Leu Thr Ala Ser  
                   140                  145                  150  
 Leu Pro Pro Arg Arg Asp Ser Thr Glu Ala Pro Lys Pro Lys Ser  
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 Ser Pro Glu Gln Pro Ile Gly Gln Gly Arg Ile Arg Val Gly Thr  
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 Gln Leu Arg Val Leu Gly Pro Glu Asp Asp Leu Ala Gly Met Phe  
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 Leu Gln Ile Phe Pro Leu Ser Pro Asp Pro Arg Trp Gln Ser Ser  
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 Ser Pro Arg Pro Val Ala Leu Ala Leu Gln Gln Ala Leu Gly Gln  
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 Glu Leu Ala Arg Val Val Gln Gly Ser Pro Glu Val Pro Gly Ile  
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 Thr Val Arg Val Leu Gln Ala Leu Ala Thr Leu Leu Ser Ser Pro  
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 His Gly Gly Ala Leu Val Met Ser Met His Arg Ser His Phe Leu  
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 Ala Cys Pro Leu Leu Arg Gln Leu Cys Gln Tyr Gln Arg Cys Val  
                   275                  280                  285  
 Pro Gln Asp Thr Gly Phe Ser Ser Leu Phe Leu Lys Val Leu Leu  
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 Arg Arg Leu Ser Asp Val Arg Gly Gly Leu Leu Arg Leu Ala Glu  
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 Ala Leu Ala Phe Arg Gln Asp Leu Glu Val Val Ser Ser Thr Val  
                   350                  355                  360  
 Arg Ala Val Ile Ala Thr Leu Arg Ser Gly Glu Gln Cys Ser Val  
                   365                  370                  375  
 Glu Pro Asp Leu Ile Ser Lys Val Leu Gln Gly Leu Ile Glu Val  
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 Arg Ser Pro His Leu Glu Glu Leu Leu Thr Ala Phe Phe Ser Ala

395	400	405
Thr Ala Asp Ala Ala Ser Pro Phe Pro Ala Cys Lys Pro Val Val 410	415	420
Val Val Ser Ser Leu Leu Leu Gln Glu Glu Glu Pro Leu Ala Gly 425	430	435
Gly Lys Pro Gly Ala Asp Gly Gly Ser Leu Glu Ala Val Arg Leu 440	445	450
Gly Pro Ser Ser Gly Leu Leu Val Asp Trp Leu Glu Met Leu Asp 455	460	465
Pro Glu Val Val Ser Ser Cys Pro Asp Leu Gln Leu Arg Leu Leu 470	475	480
Phe Ser Arg Arg Lys Gly Lys Gly Gln Ala Gln Val Pro Ser Phe 485	490	495
Arg Pro Tyr Leu Leu Thr Leu Phe Thr His Gln Ser Ser Trp Pro 500	505	510
Thr Leu His Gln Cys Ile Arg Val Leu Leu Gly Lys Ser Arg Glu 515	520	525
Gln Arg Phe Asp Pro Ser Ala Ser Leu Asp Phe Leu Trp Ala Cys 530	535	540
Ile His Val Pro Arg Ile Trp Gln Gly Arg Asp Gln Arg Thr Pro 545	550	555
Gln Lys Arg Arg Glu Glu Leu Val Leu Arg Val Gln Gly Pro Glu 560	565	570
Leu Ile Ser Leu Val Glu Leu Ile Leu Ala Glu Ala Glu Thr Arg 575	580	585
Ser Gln Asp Gly Asp Thr Ala Ala Cys Ser Leu Ile Gln Ala Arg 590	595	600
Leu Pro Leu Leu Leu Ser Cys Cys Cys Gly Asp Asp Glu Ser Val 605	610	615
Arg Lys Val Thr Glu His Leu Ser Gly Cys Ile Gln Gln Trp Gly 620	625	630
Asp Ser Val Leu Gly Arg Arg Cys Arg Asp Leu Leu Leu Gln Leu 635	640	645
Tyr Leu Gln Arg Pro Glu Leu Arg Val Pro Val Pro Glu Val Leu 650	655	660
Leu His Ser Glu Gly Ala Ala Ser Ser Ser Val Cys Lys Leu Asp 665	670	675
Gly Leu Ile His Arg Phe Ile Thr Leu Leu Ala Asp Thr Ser Asp 680	685	690

Ser Arg Ala Leu Glu Asn Arg Gly Ala Asp Ala Ser Met Ala Cys  
 695 700 705  
 Arg Lys Leu Ala Val Ala His Pro Leu Leu Leu Leu Arg His Leu  
 710 715 720  
 Pro Met Ile Ala Ala Leu Leu His Gly Arg Thr His Leu Asn Phe  
 725 730 735  
 Gln Glu Phe Arg Gln Gln Asn His Leu Ser Cys Phe Leu His Val  
 740 745 750  
 Leu Gly Leu Leu Glu Leu Leu Gln Pro His Val Phe Arg Ser Glu  
 755 760 765  
 His Gln Gly Ala Leu Trp Asp Cys Leu Leu Ser Phe Ile Arg Leu  
 770 775 780  
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 Asn Lys Phe Val Gln Phe Ile His Lys Tyr Ile Thr Tyr Asn Ala  
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 Pro Ala Ala Ile Ser Phe Leu Gln Lys His Ala Asp Pro Leu His  
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 Gly Leu Asp Glu Glu Gly Glu Glu Ser Ser Ala Gly Ser Leu  
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 Pro Leu Val Ser Val Ser Leu Phe Thr Pro Leu Thr Ala Ala Glu  
 875 880 885  
 Met Ala Pro Tyr Met Lys Arg Leu Ser Arg Gly Gln Thr Val Glu  
 890 895 900  
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 Arg Pro Glu Ile Leu Ser Phe Phe Ser Thr Asn Leu Gln Arg Leu  
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 Met Ser Ser Ala Glu Glu Cys Cys Arg Asn Leu Ala Phe Ser Leu  
 935 940 945  
 Ala Leu Arg Ser Met Gln Asn Ser Pro Ser Ile Ala Ala Ala Phe  
 950 955 960  
 Leu Pro Thr Phe Met Tyr Cys Leu Gly Ser Gln Asp Phe Glu Val  
 965 970 975  
 Val Gln Thr Ala Leu Arg Asn Leu Pro Glu Tyr Ala Leu Leu Cys

980	985	990
Gln Glu His Ala Ala Val Leu Leu His Arg Ala Phe Leu Val Gly		
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Arg Ile Leu His Met Glu Ala Val Met		
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<212> DNA  
<213> Homo sapiens

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Gln Lys Gly Asp Val Val Asp Val Tyr Gln Arg Glu Phe Leu Ala  
                  35                        40                        45  
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                  50                        55                        60  
 Ser Lys Glu Leu Asn Leu Val Leu Asp Glu Ile Lys Arg Ala Val  
                  65                        70                        75  
 Ser Glu Arg Gln Ala Leu Arg Asp Gly Asp Gly Asn Arg Thr Trp  
                  80                        85                        90  
 Gly Arg Leu Thr Glu Asp Pro Arg Leu Lys Pro Trp Asn Gly Ser  
                  95                        100                      105  
 His Arg His Val Leu His Leu Pro Thr Val Phe His His Leu Pro  
                  110                       115                      120  
 His Leu Leu Ala Lys Glu Ser Ser Leu Gln Pro Ala Val Arg Val  
                  125                       130                      135  
 Gly Gln Gly Arg Thr Gly Val Ser Val Val Met Gly Ile Pro Ser  
                  140                       145                      150  
 Val Arg Arg Glu Val His Ser Tyr Leu Thr Asp Thr Leu His Ser  
                  155                       160                      165  
 Leu Ile Ser Glu Leu Ser Pro Gln Glu Lys Glu Asp Ser Val Ile  
                  170                       175                      180  
 Val Val Leu Ile Ala Glu Thr Asp Ser Gln Tyr Thr Ser Ala Val  
                  185                       190                      195  
 Thr Glu Asn Ile Lys Ala Leu Phe Pro Thr Glu Ile His Ser Gly  
                  200                       205                      210  
 Leu Leu Glu Val Ile Ser Pro Ser Pro His Phe Tyr Pro Asp Phe  
                  215                       220                      225  
 Ser Arg Leu Arg Glu Ser Phe Gly Asp Pro Lys Glu Arg Val Arg  
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 Trp Arg Thr Lys Gln Asn Leu Asp Tyr Cys Phe Leu Met Met Tyr  
                  245                       250                      255  
 Ala Gln Ser Lys Gly Ile Tyr Tyr Val Gln Leu Glu Asp Asp Ile  
                  260                       265                      270  
 Val Ala Lys Pro Asn Tyr Leu Ser Thr Met Lys Asn Phe Ala Leu  
                  275                       280                      285  
 Gln Gln Pro Ser Glu Asp Trp Met Ile Leu Glu Phe Ser Gln Leu  
                  290                       295                      300  
 Gly Phe Ile Gly Lys Met Phe Lys Ser Leu Asp Leu Ser Leu Ile  
                  305                       310                      315  
 Val Glu Phe Ile Leu Met Phe Tyr Arg Asp Lys Pro Ile Asp Trp

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335	340	345
Asp Ala Lys His Cys Asp Arg Gln Lys Ala Asn Leu Arg Ile Arg		
350	355	360
Phe Lys Pro Ser Leu Phe Gln His Val Gly Thr His Ser Ser Leu		
365	370	375
Ala Gly Lys Ile Gln Lys Leu Lys Asp Lys Asp Phe Gly Lys Gln		
380	385	390
Ala Leu Arg Lys Glu His Val Asn Pro Pro Ala Glu Val Ser Thr		
395	400	405
Ser Leu Lys Thr Tyr Gln His Phe Thr Leu Glu Lys Ala Tyr Leu		
410	415	420
Arg Glu Asp Phe Phe Trp Ala Phe Thr Pro Ala Ala Gly Asp Phe		
425	430	435
Ile Arg Phe Arg Phe Phe Gln Pro Leu Arg Leu Glu Arg Phe Phe		
440	445	450
Phe Arg Ser Gly Asn Ile Glu His Pro Glu Asp Lys Leu Phe Asn		
455	460	465
Thr Ser Val Glu Val Leu Pro Phe Asp Asn Pro Gln Ser Asp Lys		
470	475	480
Glu Ala Leu Gln Glu Gly Arg Thr Ala Thr Leu Arg Tyr Pro Arg		
485	490	495
Ser Pro Asp Gly Tyr Leu Gln Ile Gly Ser Phe Tyr Lys Gly Val		
500	505	510
Ala Glu Gly Glu Val Asp Pro Ala Phe Gly Pro Leu Glu Ala Leu		
515	520	525
Arg Leu Ser Ile Gln Thr Asp Ser Pro Val Trp Val Ile Leu Ser		
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<210> 30  
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gtccagcaag ccctcatt 18  
  
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cttctgggcc acagccctgc 20  
  
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<210> 38

<211> 28

<212> DNA

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<223> Synthetic Oligonucleotide Probe

<400> 38

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